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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/025,163 | 12/18/2001 | Peter Gernhart | 20021369 | 6243 |

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GUDRUN E. HUCKETT
LONSSTR. 53
WUPPERTAL, 42289
GERMANY

EXAMINER

NGUYEN, TUAN N

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
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2828

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,163

Applicant(s)

GERNHART ET AL.

Examiner

Tuan N Nguyen

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pw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.



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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

1 Claim 1 this application conflict with claim 1 of US 6563083. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claim 1 objected to under 37 CFR 1.75 as being a substantial duplicate of one another. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-19 are rejected under 35 U.S.C 112, second paragraph, as being indefinite, vague, and confusing for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, **for example**.

Claim 1 recites laser beam optics for a robot link "..., wherein a first beam path of a first working laser beam is arranged on the longitudinal axis, *wherein the first beam path is configured to be deflected at an end facing a workpiece into an axis-parallel second beam path*, and wherein a third beam path of a second working laser beam is arranged axis-parallel to the first beam path of the first working laser beam in the robot link, the laser beam optics comprising: *first and second optical elements arranged successively in one of the first and second beam paths of the first laser beam in a transmission direction toward a workpiece*, wherein the two optical elements are adjusted relative to one another so as to compensate laser beam displacement of the first working laser beam, and wherein the second optical element arranged downstream in the transmission direction is configured to receive the second working laser beam and reflect the second working laser beam toward the workpiece." It is vague and indefinite as whether the second beam is parallel to the first beam, before or after the beam has been deflected at an end facing. It also vague and indefinite as to the first and second optical elements *arranged successively in the first or second beam path so that the beam will travel through the elements independently*, or the optical elements are arranged so that both laser beams will travel through the optical elements. There is no means to generate the beams nor sufficient structure and functional relationship to conform laser beam optics, which render the claims vague and indefinite. Claims 2-19 are rejected base on the same reason.

Claim Rejections - 35 USC § 102

4. The following is a quotation of 35 U.S.C. 102(b) which forms the basis for all obviousness rejections set forth in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 8-13, 15-19 are rejected under 35 U.S.C. 102(a) as being unpatentable Hohberg (US 4707596) or Muller et al. (US 4659916).

Claim 1 is rejected under 35 U.S.C. 102(b) as being unpatentable over Hohberg '596 or Muller et al. '916. Hohberg '596 shows in figure two laser beam parallel to one another (1,2), where the first beam deflected at an end facing into an axis-parallel second beam path, wherein first and second optical elements arranged successively in one of the first and second beam paths; Where the two optical elements adjusted relative to one another to compensate for the beam displacement (8, 10, 12, 201), and reflect the second beam toward the workpiece. Muller et al. '916 shows in figure two laser beam parallel to one another (1,2), where the first beam deflected at an end facing into an axis-parallel second beam path, wherein first and second optical elements arranged successively in one of the first and second beam paths; Where the two optical elements adjusted relative to one another to compensate for the beam displacement (8-12) and reflect the second beam toward the workpiece.

With respect to claims 2, 3, 8-13, 15-19 Muller et al. '916 shows the first and second optical element arranged relative to one another and an angle effecting compensation of laser beam displacement; second optical element has reflector surface and a deflecting mirror; a beam displacement module and an element support configured to receive first and second optical elements (F1: 8,10,11); where optical elements are in a housing (F1: 3) and a fourth beam path.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or non-obviousness.

8. Claims 4-6, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohberg (US 4707596) or Muller et al. (US 4659916) in view of Inoue (US 4689467).

With respect to claim 4-6, and 14, the claims further require the optical elements are prism, the optical element transmissive for CO₂ and highly reflective for Nd:Yad laser, and the deflection secured on the exterior wall and. Muller et al. '916 discloses the above, while Inoue '467 (Col 4: 20-25) discloses a laser machining apparatus using CO₂ or Nd:Yag laser, and having prism. It is within one skill in the art to provide Muller et al. '916 laser operate using CO₂ or Nd:Yag laser or prism instead of reflector as taught by Inoue '467. It has been held to be within general skill of a worker in the art to select a known material on the basis or its intended used as a matter of obvious design choice. Also, It has been held that rearranging the

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parts of an invention, by having the deflection secure on exterior or interior wall, involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Citation of Pertinent References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is cited primarily to show the product of the instant invention.

Wynne et al. (US US006447503B1), Muller et al (US 4618759), Akeel et al. (US 5034618), Matsuo et al. (US 6127649), and others in PTO-892 discloses multiple parallel laser beam and robot arm related mirror mounting.

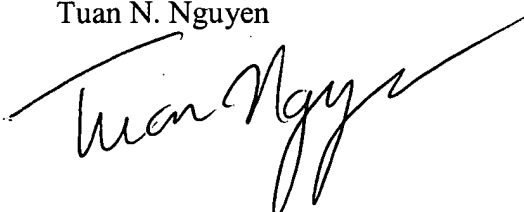
Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (703) 605-0756. The examiner can normally be reached on M-F: 7:30 - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

Tuan N. Nguyen



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